of granular cell plasma membranes are also average values and comparisons with the plasma membranes of other types of cell whose lipid compositions are maintained in a "steady state" are not valid. The phospholipids and probably the triglycerides as well are completely catabolized as the differentiation of the epidermal cell is completed and it passes from the upper granular layer into the stratum corneum. There is also a partial loss of glycolipids [1]. We have suggested that our preparations of plasma membranes represent those from cells in the upper granular layer of the epidermis. On this basis the relative proportions of the "stable" or "retained" lipids in these membranes, that is, of cholesterol, fatty acids, ceramides, the remaining glycolipids and small amounts of cholesterol esters, hydrocarbons and cholesterol sulfate, may be close to values for these lipids in the plasma membranes of the fully differentiated cells of the stratum corneum. Such information is valuable for studies on the barrier function of the stratum corneum.

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